

=====

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: markspencer

Timestamp: [year=2008; month=1; day=11; hr=17; min=25; sec=40; ms=405;]

=====

Application No: 10533634 Version No: 2.1

Input Set:

Output Set:

Started: 2008-01-11 17:24:24.155
Finished: 2008-01-11 17:24:26.709
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 554 ms
Total Warnings: 200
Total Errors: 0
No. of SeqIDs Defined: 200
Actual SeqID Count: 200

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20)

Input Set:

Output Set:

Started: 2008-01-11 17:24:24.155
Finished: 2008-01-11 17:24:26.709
Elapsed: 0 hr(s) 0 min(s) 2 sec(s) 554 ms
Total Warnings: 200
Total Errors: 0
No. of SeqIDs Defined: 200
Actual SeqID Count: 200

Error code	Error Description
	This error has occurred more than 20 times, will not be displayed

SEQUENCE LISTING

<110> THE UNITED STATES OF AMERICA AS REPRESENTED BY THE
SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES
Klinman, Dennis M.
Ivins, Bruce
Verthelyi, Daniela

<120> METHOD OF PREVENTING INFECTIONS FROM BIOTERRORISM AGENTS WITH
IMMUNOSTIMULATORY CpG OLIGONUCLEOTIDES

<130> 4239-67021-06

<140> US 10/533,634

<141> 2005-04-29

<150> PCT/US2003/034523

<151> 2003-10-31

<150> US 60/422,964

<151> 2002-11-01

<160> 200

<170> PatentIn version 3.2

<210> 1

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> CpG D oligonucleotide

<220>

<221> misc_feature

<222> (1)...(2)

<223> n is any base, or no base at all

<400> 1

nntgcatcga tgcagggggg

20

<210> 2

<211> 20

<212> DNA

<213> Artificial sequence

<220>

<223> CpG D oligonucleotide

<220>

<221> misc_feature

<222> (1)...(2)

<223> n is any base, or no base at all

<400> 2
nntgcacccgg tgcagggggg 20

<210> 3
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is any base, or no base at all

<400> 3
nntgcgtcga cgcagggggg 20

<210> 4
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is any base, or no base at all

<400> 4
nntgcgtcga tgcagggggg 20

<210> 5
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is any base, or no base at all

<400> 5
nntgcgccccgg cgcagggggg 20

```
<210> 6
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is any base, or no base at all

<400> 6
nntgcgccga tgcagggggg 20

<210> 7
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is any base, or no base at all

<400> 7
nntgcatcga cgcagggggg 20

<210> 8
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<220>
<221> misc_feature
<222> (1)..(2)
<223> n is any base, or no base at all

<400> 8
nntgcgtcgg tgcagggggg 20

<210> 9
```

<211> 6
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 9
atcgat

6

<210> 10
<211> 6
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 10
accgggt

6

<210> 11
<211> 6
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 11
atcgac

6

<210> 12
<211> 6
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 12
accgat

6

<210> 13
<211> 6
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 13
gtcgac

6

<210> 14
<211> 6
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 14
gcccggc 6

<210> 15
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 15
ggtgcatcga tacaggggg 20

<210> 16
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 16
ggtgcgtcga tgcaggggg 20

<210> 17
<211> 15
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 17
gctagacgtt agcgt 15

<210> 18
<211> 10
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 18
tcaacgttga 10

<210> 19
<211> 15
<212> DNA
<213> Artificial sequence

<220>
<223> Control D oligonucleotide

<400> 19
gcttagagctt aggct 15

<210> 20
<211> 10
<212> DNA
<213> Artificial sequence

<220>
<223> Control D oligonucleotide

<400> 20
tcaagcttga 10

<210> 21
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 21
ggtgcatcga tgcaggggg 20

<210> 22
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 22
ggtgcacccgg tgcaggggg 20

<210> 23
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 23
atcgactctc gagcggttctc 20

<210> 24
<211> 12
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 24
tcgttcgttc tc 12

<210> 25
<211> 12
<212> DNA
<213> Artificial sequence

<220>
<223> CpG D oligonucleotide

<400> 25
tcgagcggtc tc 12

<210> 26
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> Control D oligonucleotide

<400> 26
ggtgcatatga tgcagggggg 20

<210> 27
<211> 12
<212> DNA
<213> Artificial sequence

<220>
<223> Control D oligonucleotide

<400> 27
ttgagtgttc tc 12

<210> 28

<211> 16
<212> DNA
<213> Artificial sequence

<220>
<223> Control D oligonucleotide

<400> 28
gggcatgcata gggggg 16

<210> 29
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 29
tccatgtcgc tcctgatgct 20

<210> 30
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 30
tccatgtcgt tcctgatgct 20

<210> 31
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 31
tcgtcgaaaaat gtcgttttgt cgt 23

<210> 32
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 32
tcgtcgaaaaat cgttgtcgaa 20

<210> 33
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 33
tcgtcgaaaaatcgatgtttt gtcgtttgtc gtt 23

<210> 34
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 34
tcgtcgatgttgcgttttgcgttgcg tt 22

<210> 35
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 35
gcgtgcgttttgcgttgcgt t 21

<210> 36
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 36
tgtcgatgttgcgttttgcgttgcgt t 21

<210> 37
<211> 19
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 37
tgtcggtgtc gttgtcggt 19

<210> 38
<211> 14
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 38
tcgtcgctgt cgtt 14

<210> 39
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 39
tcctgtcggtt ccttgcgtt 20

<210> 40
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 40
tcctgtcggtt ttttgcgtt 20

<210> 41
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 41
tcgtcgctgt ctgcccttct t 21

<210> 42
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 42
tcgtcgctgt tgcgtttct t 21

<210> 43
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> K oligonucleotide

<400> 43
tccatgacgt tcctgacgtt 20

<210> 44
<211> 16
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(12)
<223> n is a, c, g, or t

<400> 44
nnnrycgryn nnnggg 16

<210> 45
<211> 17
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

```
<220>
<221> misc_feature
<222> (10)..(13)
<223> n is a, c, g, or t
```

```
<400> 45
nnnrycgryn nnnggg
```

17

```
<210> 46
<211> 18
<212> DNA
<213> Artificial sequence
```

```
<220>
<223> synthetic
```

```
<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t
```

```
<220>
<221> misc_feature
<222> (10)..(14)
<223> n is a, c, g, or t
```

```
<400> 46
nnnrycgryn nnngggg
```

18

```
<210> 47
<211> 19
<212> DNA
<213> Artificial sequence
```

```
<220>
<223> synthetic
```

```
<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t
```

```
<220>
<221> misc_feature
<222> (10)..(15)
<223> n is a, c, g, or t
```

```
<400> 47
nnnrycgryn nnngggg
```

19

```
<210> 48
<211> 20
```

<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(16)
<223> n is a, c, g, or t

<400> 48

nnnrycgryn nnnnnnggg

20

<210> 49
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(17)
<223> n is a, c, g, or t

<400> 49

nnnrycgryn nnnnnnnnggg g

21

<210> 50
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(18)
<223> n is a, c, g, or t

<400> 50
nnnrycgryn nnnnnnnngg gg 22

<210> 51
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(19)
<223> n is a, c, g, or t

<400> 51
nnnrycgryn nnnnnnnnnng ggg 23

<210> 52
<211> 24
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(20)
<223> n is a, c, g, or t

<400> 52
nnnrycgryn nnnnnnnnnngggg 24

<210> 53

```
<211> 25
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic
```

```
<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t
```

```
<220>
<221> misc_feature
<222> (10)..(21)
<223> n is a, c, g, or t
```

```
<400> 53
nnnrycgryn nnnnnnnnnn ngggg
```

25

```
<210> 54
<211> 26
<212> DNA
<213> Artificial sequence
```

```
<220>
<223> synthetic
```

```
<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t
```

```
<220>
<221> misc_feature
<222> (10)..(22)
<223> n is a, c, g, or t
```

```
<400> 54
nnnrycgryn nnnnnnnnnn nngggg
```

26

```
<210> 55
<211> 17
<212> DNA
<213> Artificial sequence
```

```
<220>
<223> synthetic
```

```
<220>
<221> misc_feature
<222> (1)..(3)
```

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (10)..(12)

<223> n is a, c, g, or t

<400> 55

nnnrycgryn nnggggg

17

<210> 56

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> synthetic

<220>

<221> misc_feature

<222> (1)..(3)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (10)..(13)

<223> n is a, c, g, or t

<400> 56

nnnrycgryn nnnggggg

18

<210> 57

<211> 19

<212> DNA

<213> Artificial sequence

<220>

<223> synthetic

<220>

<221> misc_feature

<222> (1)..(3)

<223> n is a, c, g, or t

<220>

<221> misc_feature

<222> (10)..(14)

<223> n is a, c, g, or t

<400> 57

nnnrycgryn nnnnggggg

19

<210> 58
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(15)
<223> n is a, c, g, or t

<400> 58
nnnrycgryn nnnnnngggg

20

<210> 59
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(16)
<223> n is a, c, g, or t

<400> 59
nnnrycgryn nnnnnngggg g

21

<210> 60
<211> 22
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature

<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(17)
<223> n is a, c, g, or t

<400> 60
nnnrycgryn nnnnnnnnggg gg

22

<210> 61
<211> 23
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(18)
<223> n is a, c, g, or t

<400> 61
nnnrycgryn nnnnnnnngg ggg

23

<210> 62
<211> 24
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(19)
<223> n is a, c, g, or t

<400> 62
nnnrycgryn nnnnnnnngg gggg

24

<210> 63
<211> 25
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(20)
<223> n is a, c, g, or t

<400> 63
nnnrycgryn nnnnnnnnnn ggggg

25

<210> 64
<211> 26
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(21)
<223> n is a, c, g, or t

<400> 64
nnnrycgryn nnnnnnnnnn nggggg

26

<210> 65
<211> 27
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>

```
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t
```

```
<220>
```

```
<221> misc_feature
<222> (10)..(22)
<223> n is a, c, g, or t
```

```
<400> 65
```

```
nnnrycgryn nnnnnnnnnn nnggggg
```

27

```
<210> 66
<211> 18
<212> DNA
<213> Artificial sequence
```

```
<220>
```

```
<223> synthetic
```

```
<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t
```

```
<220>
<221> misc_feature
<222> (10)..(12)
<223> n is a, c, g, or t
```

```
<400> 66
```

```
nnnrycgryn nngggggg
```

18

```
<210> 67
<211> 19
<212> DNA
<213> Artificial sequence
```

```
<220>
```

```
<223> synthetic
```

```
<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t
```

```
<220>
<221> misc_feature
<222> (10)..(13)
<223> n is a, c, g, or t
```

```
<400> 67
```

```
nnnrycgryn nnngggggg
```

19

<210> 68
<211> 20
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<222> (10)..(14)
<223> n is a, c, g, or t

<400> 68

nnnrycgryn nnnngggggg

20

<210> 69
<211> 21
<212> DNA
<213> Artificial sequence

<220>
<223> synthetic

<220>
<221> misc_feature
<222> (1)..(3)
<223> n is a, c, g, or t

<220>
<221> misc_feature
<